

Abstract

The invention relates to a method for converting gaseous effluents based on hydrogen arising from at least two reactor units R1 and R2 consuming hydrogen. Said effluents have differing degrees of hydrogen purity. The different hydrogenous effluents are treated in a gas separation unit U for said different hydrogenous effluents, whereupon highly pure hydrogen can be obtained and can be used to feed an additional reactor unit R3. The unit U also produces a residual flow having a low degree of hydrogen purity which can be sent to the combustible gas network of the petrochemical installation.